

AMENDMENTS TO THE CLAIMS

The text of all pending claims, including withdrawn claims, is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 3, and 16 to read as follows:

1. (Currently Amended) A system, comprising:
 - a disc cartridge including a shutter and a reference surface having a reference area and a low area formed in the reference surface to have a low surface recessed relative to the reference surface to form a step therebetween; and
 - an apparatus for loading the disc cartridge in a drive, the apparatus comprising
 - a tray to accommodate the disc cartridge and comprising an interference portion ~~which protrudes from an upper surface of the tray to have a height corresponding to a height of the step,~~ and
 - a blocking element disposed adjacent the tray at an opening into the drive, wherein:
 - when the disc cartridge is received on the tray in a normal orientation, the interference portion is received within another portion of the low area, ~~contiguous with a portion in which the shutter moves,~~ without interfering with a movement of the shutter in the low area, and
 - when the disc cartridge is accommodated on the tray in an abnormal orientation, the interference portion contacts and interferes with the reference area such that the cartridge is blocked by the blocking element as the tray moves toward the opening of the drive, the interference portion urging the disc cartridge to a side of the opening other than a top side or a bottom side.

2. (Previously Presented) The system as claimed in claim 1, wherein the interference portion has a shape of a protrusion.

3. (Currently Amended) A system, comprising:
a disc cartridge, which holds a disc and includes
a first surface disposed at a first level
a second surface disposed at a second level other than the first level and forming a step therebetween, and
a shutter that is moveable on a portion of the second surface to allow access to the disc;
and
a housing to accommodate and load the disc cartridge, the housing comprising
a case having an opening and a blocking element, and
a tray on which the disc cartridge is accommodated at an accommodation position and which includes an interfering element that selectively aligns the disc cartridge into first and second orientations according to an interaction with the first and second surfaces of the disc cartridge,
wherein:
if the disc cartridge is accommodated in the first orientation, the interfering element is received at another portion of the second surface ~~contiguous with the portion in which the shutter moves~~, and the tray and the accommodated disc cartridge are moveable into the case, past the blocking element, through the opening, and
if the disc cartridge is accommodated in the second orientation other than the first orientation the interfering element is received at the first surface and urges the disc cartridge to a side of the opening other than a top side or a bottom, and the tray and the accommodated disc cartridge are blocked by the blocking element and are not received into the case through the opening.

4. (Cancelled)

5. (Previously Presented) The system of claim 3, wherein the interfering element allows the disc cartridge to remain substantially parallel with a surface of the tray when in the first orientation, and elevates a portion of the disc cartridge away from the surface of the tray so as to contact the blocking element to prevent entry into the opening when in the second orientation.

6. (Previously Presented) The system of claim 3, wherein
when accommodated on the tray in the first orientation, the shutter is disposed between

the opening and the first surface, and

when accommodated on the tray in the second orientation, the first surface is disposed between the opening and the shutter.

7-9. (Cancelled)

10. (Previously Presented) The system of claim 3, wherein:

the second surface is recessed a depth below the first surface; and

the interfering element has a height above a surface of the tray that is at or less than the depth of the recessed surface of the disc cartridge such that, when received in the first orientation, the disc cartridge is substantially parallel with the surface of the tray.

11. (Previously Presented) The system of claim 10, wherein:

the blocking element is disposed over the surface of the tray by a first distance, and

when received in the second orientation, the interfering element contacts the first surface of the disc cartridge, and the height of the interfering element is sufficient to elevate a portion of the disc cartridge away from the surface of the tray by at least the first distance such that, during insertion into the opening, the elevated portion of the disc cartridge contacts the blocking element to prevent entry into the opening.

12. (Previously Presented) The system of claim 3, further comprising a rail along

which the tray is slidably received in the housing.

13. (Previously Presented) The system of claim 3, further comprising an optical

pickup unit to transfer data with respect to the disc.

14. (Previously Presented) The system of claim 3, wherein the tray further comprises

a disc accommodation area on which the tray receives another disc not within the disc cartridge.

15. (Previously Presented) The system of claim 3, wherein:

when accommodated at the first orientation, a centerline of the disc cartridge is disposed at a first angle that is substantially parallel with a direction in which the tray is loaded into the case through the opening, and

when accommodated at the second orientation, the centerline of the disc cartridge is

disposed to be sufficiently non-parallel with the direction so as misalign the disc cartridge to extend sufficiently away from the tray to contact the blocking element so as to prevent entry through the opening.

16. (Currently Amended) A system, comprising:
a disc cartridge, in which a disc is placeable, the cartridge comprising
a reference surface and a low area recessed from the reference surface to form a step therebetween, and
a shutter movable in the low area to selectively expose a surface of a disc; and
a housing to accommodate and load the disc cartridge, the housing comprising
a case having a blocking element disposed at an opening thereto, and
a tray, movable into and out of the case via the opening, and on which the disc cartridge is accommodated at an accommodation position, the tray comprising
an interfering element that selectively aligns the disc cartridge into first and second orientations according to an interaction with the reference surface or the low area,
wherein the interfering element is positioned such that
when the disc cartridge is accommodated in the first orientation, the interfering element interacts with another portion of the low area, ~~contiguous with the portion in which the shutter moves,~~ without interfering with a range of motion of the shutter, and when it is attempted to move the tray into the housing, the tray and the accommodated cartridge are received into the case through the opening, and
when the disc cartridge is accommodated in the second orientation other than the first orientation, the interfering element interacts with the reference surface urging the disc cartridge to a side of the opening other than a top side or a bottom and when it is attempted to move the tray into the housing, the tray and the accommodated cartridge are blocked by the blocking element and are not received into the case through the opening.

17. (Previously Presented) The system according to claim 16, wherein the disc cartridge is double sided, such that opposing faces of the disc cartridge each have a reference surface and a low area.